

DP-309088
65899-0692

WHAT IS CLAIMED IS:

1. An antenna system, comprising:
at least one first antenna located about a first portion of a mobile structure that is capable of receiving satellite and terrestrial re-transmitted satellite signals; and
at least one second antenna located about a second portion of the mobile structure that is capable of receiving satellite and terrestrial re-transmitted satellite signals,
wherein the at least one first and second antenna receives the satellite and terrestrial re-transmitted satellite signals, such that signal reception on the mobile structure is maintained by switching and/or combining the satellite and terrestrial re-transmitted satellite signals received by the at least one first and second antennas when the satellite and terrestrial re-transmitted satellite signals being received by the at least one first or second antenna is obstructed.
2. The antenna system according to Claim 1, wherein the satellite and terrestrial re-transmitted satellite signals are SDARS frequencies ranging between 2320 -2345 MHz.
3. The antenna system according to Claim 1, wherein the at least one first and second antenna are located within the mobile structure.
4. The antenna system according to Claim 1, wherein the at least one first and second antenna are located exteriorly on the mobile structure.
5. The antenna system according to Claim 1, wherein the at least one first and second antenna are located within the mobile structure and exteriorly on the mobile structure.

DP-309088
65899-0692

6. The antenna system according to Claim 1, wherein the mobile structure is an automotive vehicle, aircraft, boat, train, mobile home, recreational vehicle or truck.
7. The antenna system according to Claim 6, wherein the first and second portions are opposingly located on a front end of the mobile structure and a rear end of the mobile structure.
8. The antenna system according to Claim 7, wherein the at least one first and second antenna are located on front end interior glass or rear end interior glass.
9. The antenna system according to Claim 8, wherein the at least one first and second antenna are located on front end exterior glass or rear end exterior glass.
10. The antenna system according to Claim 9, wherein the glass is automotive windshield glass.
11. The antenna system according to Claim 7, wherein the at least one first and second antenna are located on front end interior panel or rear end interior panel.
12. The antenna system according to Claim 11, wherein the front end interior panel is an automotive dashboard or instrument panel and the rear end interior panel is an automotive rear deck panel.
13. The antenna system according to Claim 7, wherein the at least one first and second antenna are located on front end exterior panel or rear end exterior panel.

DP-309088
65899-0692

14. The antenna system according to Claim 13, wherein the front end exterior panel is an automotive front fender or glass frame and the rear end exterior panel is an automotive rear fender or glass frame.

15. The antenna system according to Claim 1, wherein the at least one first and second antenna includes a circuit board, substrate, low noise amplifier, a ground plane, and a conductive area.

16. The antenna system according to Claim 15, wherein the conductive area is a patch of material that defines a patch antenna.

17. The antenna system according to Claim 15, wherein the conductive area is a loop of material that defines a loop antenna.

18. The antenna system according to Claim 17, wherein the loop antenna further comprises parasitic elements that are parasitically coupled to the low noise amplifier to define a coupled-loop antenna.

19. The antenna system according to Claim 17, wherein the loop material is helically wound to define a quadrifilar antenna.